

Quiz 4 – Microeconomics – ECON 1B

Summer Semester – Cabrillo College

Dr. Robert McNab

Name: _____

Score: _____

INSTRUCTIONS: Read each question carefully. Use the back of the quiz for extended answers.

Assume that Macrosoft is the dominant firm in its industry and is able to prevent other firms from entering through a combination of practices. It can sell 1.5 million units of its software a month at a price of \$70 a unit. At a price of \$70 a unit and a quantity of 1.5 million units, its average total cost of production is \$30 per unit with an average fixed cost of \$10 per unit.

1. Calculate Total Revenue, Total Cost, and illustrate whether Macrosoft is earning a profit, loss, breaking even or shutting down. 3 points

2. Assume the elasticity of income for Macrosoft's product is 1.5. If income increases by 3 percent, what will be the potential impact, all else being equal, on Macrosoft's sales? 2 points

Assume that diet cola is a normal good and in June 2001, a diet cola cost \$0.50 and 20 million units of diet cola were sold in California. In May 2001, a diet cola cost \$0.45 and 19.75 units were sold.

3. What is the price elasticity of demand for diet cola? 2 points.

4. If the cross-price elasticity of diet cola is 1.25 with diet orange drink, and the price of diet orange drink declines by 5%, what is the impact, all else being equal, on the quantity demanded of diet cola? 2 points

5. Should the diet cola producers lower price, assuming all else remaining equal, to increase total revenue? Why or why not? 1 point

1. $TR = P * Q = 105$, $TC = ATC * Q = 45$, Profit = 60...see illustration of monopolist making profit per class notes
2. If income increases 3 percent, quantity demanded will increase 4.5 percent ($E_y * \%change Y$) due to the shift in the demand curve for the product
3. 0.11
4. 6.25% percent decrease
5. No, since $E_p < 1$, decreasing price will not increase TR